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APPLICATION NO. 1	FILING DATE 08/15/95	FIRST NAMED INVENTOR COUCH	ATTORNEY DOCKET NO. E 20MD-1039
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PAUL DAVIS
WILSON, SONSINI, GOODRICH & ROSATI
650 PAGE MILL ROAD
PALO ALTO CA 94304

33M1/1129

EXAMINER
PEFFLEY, M

ART UNIT 351	PAPER NUMBER
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DATE MAILED: 11/29/96

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks



UNITED STATES DEPARTMENT OF COMMERCE
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NOTICE OF ALLOWANCE AND ISSUE FEE DUE

33M1/1129

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APPLICATION NO.	FILING DATE	TOTAL CLAIMS	EXAMINER AND GROUP ART UNIT	DATE MAILED
08/515,379	08/15/95	9045	PEFFLEY, M	3311 11/29/96
First Named Applicant GOUGH,			EDWARD J.	

TITLE OF INVENTION
MULTIPLE ANTENNA ABLATION APPARATUS

ATTY'S DOCKET NO.	CLASS-SUBCLASS	BATCH NO.	APPLN. TYPE	SMALL ENTITY	FEES DUE	DATE DUE
3 ZOMD-1039	606-041.000	G98	UTILITY	YES	\$645.00	02/28/97

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT.
PROSECUTION ON THE MERITS IS CLOSED.

THE ISSUE FEE MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED.

HOW TO RESPOND TO THIS NOTICE:

- I. Review the SMALL ENTITY status shown above.
If the SMALL ENTITY is shown as yes, verify your current SMALL ENTITY status:
 - A. If the status is changed, pay twice the amount of the FEE DUE shown and notify the Patent and Trademark Office of the change in status, or
 - B. If the status is the same, pay the FEE DUE shown above.
- II. Part B of this notice should be completed and returned to the Patent and Trademark Office (PTO) with your ISSUE FEE. Even if the ISSUE FEE has already been paid by charge to deposit account, Part B should be completed and returned. If you are charging the ISSUE FEE to your deposit account, section "6b" of Part B should be completed.
- III. All communications regarding this application must give application number and batch number.
Please direct all communication prior to issuance to Box ISSUE FEE unless advised to the contrary.

If the SMALL ENTITY is shown as NO:

- A. Pay FEE DUE shown above, or
- B. File verified statement of Small Entity Status before, or with, payment of 1/2 the FEE DUE shown above.

IMPORTANT REMINDER: Patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

Notice of Allowability	Application No. 08/515,379	Applicant(s) Gough et al.
	Examiner Mike Peffley	Group Art Unit 3311

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance and Issue Fee Due or other appropriate communication will be mailed in due course.

This communication is responsive to Oct 16, 1996

The allowed claim(s) is/are 1-16, 18-36, and 39-48

The drawings filed on _____ are acceptable.

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All Some* None of the CERTIFIED copies of the priority documents have been received.

received in Application No. (Series Code/Serial Number) _____

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

A SHORTENED STATUTORY PERIOD FOR RESPONSE to comply with the requirements noted below is set to EXPIRE THREE MONTHS FROM THE "DATE MAILED" of this Office action. Failure to timely comply will result in ABANDONMENT of this application. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL APPLICATION, PTO-152, which discloses that the oath or declaration is deficient. A SUBSTITUTE OATH OR DECLARATION IS REQUIRED.

Applicant MUST submit NEW FORMAL DRAWINGS

because the originally filed drawings were declared by applicant to be informal.

including changes required by the Notice of Draftsperson's Patent Drawing Review, PTO-948, attached hereto or to Paper No. _____

including changes required by the proposed drawing correction filed on Oct 16, 1996, which has been approved by the examiner.

including changes required by the attached Examiner's Amendment/Comment.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the reverse side of the drawings. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Any response to this letter should include, in the upper right hand corner, the APPLICATION NUMBER (SERIES CODE/SERIAL NUMBER). If applicant has received a Notice of Allowance and Issue Fee Due, the ISSUE BATCH NUMBER and DATE of the NOTICE OF ALLOWANCE should also be included.

Attachment(s)

- Notice of References Cited, PTO-892
- Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- Notice of Draftsperson's Patent Drawing Review, PTO-948
- Notice of Informal Patent Application, PTO-152
- Interview Summary, PTO-413
- Examiner's Amendment/Comment
- Examiner's Comment Regarding Requirement for Deposit of Biological Material
- Examiner's Statement of Reasons for Allowance

Angela D. Sykes

ANGELA D. SYKES
SUPERVISORY PATENT EXAMINER
GROUP 3300

Art Unit: 3311

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Paul Davis on November 7, 1996.

The application has been amended as follows:

Claim 1 has been rewritten as follows-

15.

1. An ablation treatment apparatus, comprising:

a multiple antenna device including a primary antenna with a longitudinal axis, and a secondary antenna coupled to the primary antenna and configured to be deployed at least partially in a lateral direction relative to the longitudinal axis with at least one radius of curvature, wherein a distal end of the primary antenna is sufficiently sharp to pierce tissue, and the primary and secondary antennas are configured to provide a selectable geometric ablation of a selected tissue mass;

an insulation sleeve positioned on an exterior of the primary antenna; and one or more cables coupled to the multiple antenna.

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Art Unit: 3311

Claim 31 has been rewritten as follows:

1. 31. An ablation apparatus comprising:
a multiple arm device including a primary arm and a longitudinal axis, and a secondary arm coupled to the primary arm and configured to be deployed in a direction that is lateral to the longitudinal axis with at least one radius of curvature, wherein a distal end of the primary arm is sufficiently sharp to pierce tissue;
an energy source; and
one or more cables coupling the energy source with the multiple arm device.

Claim 47 has been rewritten as follows:

1. 47. An ablation treatment apparatus, comprising:
a multiple antenna device including a primary antenna with a longitudinal axis, and a secondary antenna coupled to the primary antenna and configured to be deployed at least partially in a lateral direction relative to the longitudinal axis with at least one radius of curvature, wherein a distal end of the primary arm is sufficiently sharp to pierce tissue, and the primary and secondary antennas are configured to provide a selectable geometric ablation of a selected tissue mass;
an insulation sleeve positioned on an exterior of the primary antenna;
an energy source; and
one or more cables coupling the energy source to the multiple antenna device.

Art Unit: 3311

The following is an examiner's statement of reasons for allowance: as amended, the claims set forth a multiple arm device whereby a primary arm is capable of penetrating tissue and a secondary arm is deployed therefrom in a lateral direction with a radius of curvature. The arms are coupled to an energy source to provide ablative energy to a selected tissue mass via the primary and secondary arms.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mike Peffley, whose telephone number is (703) 308-4305. The examiner can normally be reached Monday through Thursday from 7:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes, can be reached at (703) 308-2713. The fax phone number for this Group is (703) 305-3590.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0858.

Michael Peffley/mp
November 8, 1996

Angel D. Sykes
ANGELA D. SYKES
SUPPLYING PATENT EXAMINER
GROUP 3300